0-3 DEVELOPMENT

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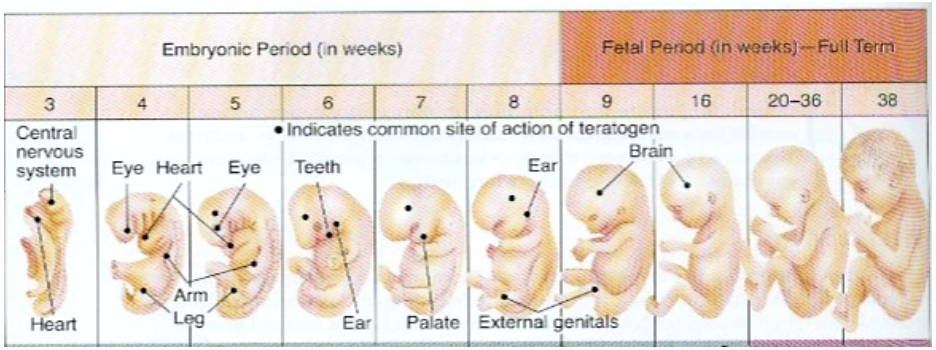
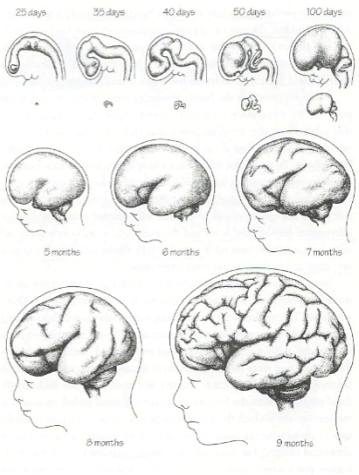
PHYSICAL

- Body Growth
  - Changes in height and weight are rapid in the first two years of life.
  - Development moves from head to tail



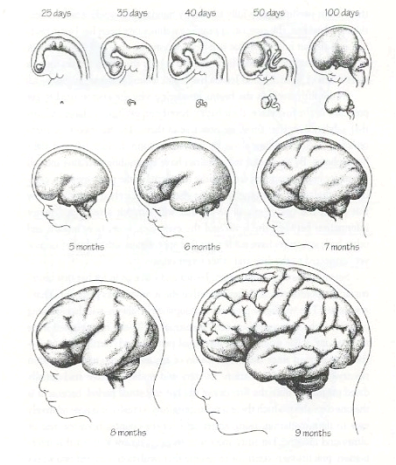
PHYSICAL

- Brain Development
  - Brain grows faster than any organ in the body



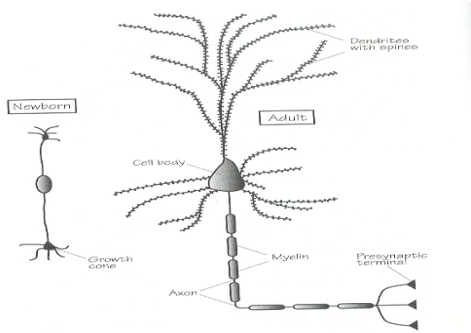
PHYSICAL

- Brain is the only organ that can learn



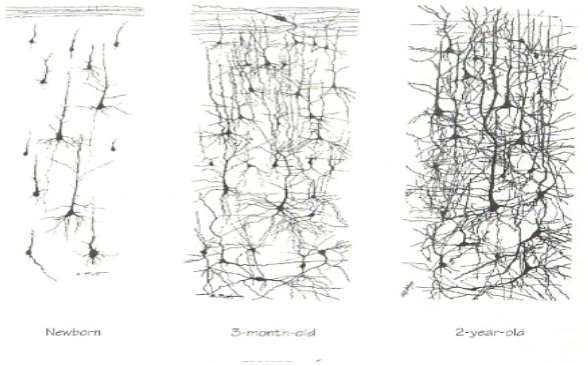
PHYSICAL

- Brain Development
  - During infancy, neurons form synapses (networks) very rapidly
  - Stimulation determines which neurons will survive or die



PHYSICAL

- Brain Development
  - Electrical activity increases as brain weight and skull size increase

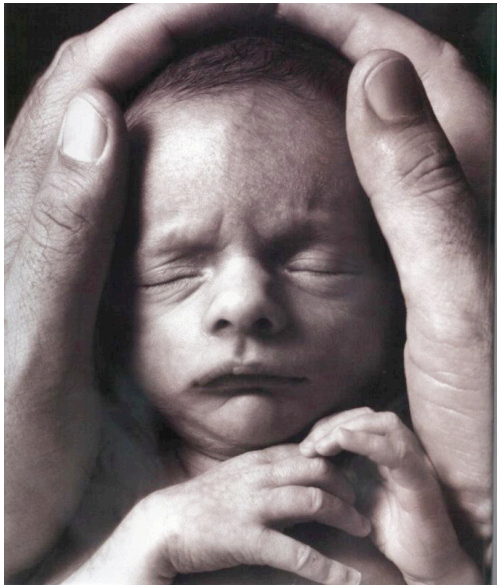


  - Cortex begins to specialize as experiences increase

PHYSICAL

- Brain Development
  - The two hemispheres begin to specialize – left is more language and right is more visual/spatial storage
  - Brain is highly plastic or able to be changed during these early years

PHYSICAL



- Changing states of arousal
  - Infant is awake for short periods of time
  - Eventually, wakefulness increases and a day an night schedule become apparent
  - Patterns are due to brain development

PHYSICAL

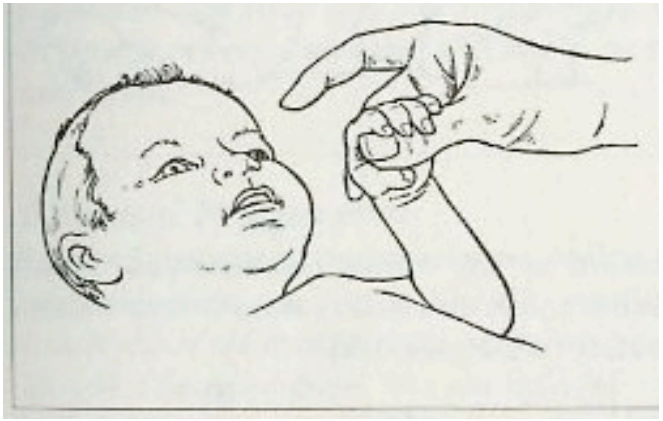
- Motor Development
  - Follows head to tail pattern
  - New skills are due to combining simple skills into more complex actions
    - Central nervous system maturation/reflex inhibition
    - Movement possibilities
    - Environmental support
    - Child's motivation

PHYSICAL

- Motor Development
  - Experience has profound influence
  - Cultural definition can form environment

PHYSICAL

- Motor Development
  - Reaching and grasping are perfected in first year



    - Pre reaching to Palmar to Pincer

PHYSICAL

- Learning Capacities
  - Infants become aware of and adapt to their surroundings
  - Sights, sounds and food can be reinforcers for learning

PHYSICAL

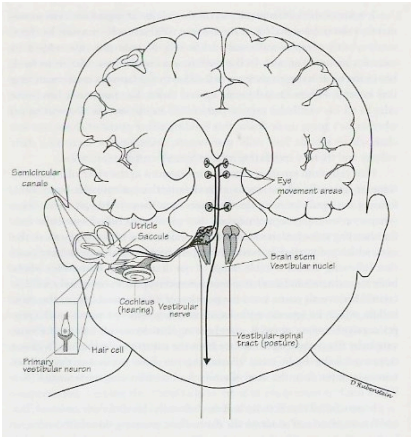
- At birth are attracted to novelty

PHYSICAL

- Newborns imitate the human face

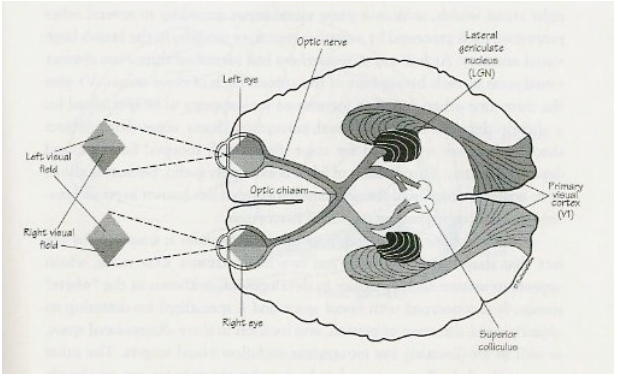
PHYSICAL

- Perceptual Development
  - Over first year
    - Organize sounds into more complex patterns
    - Become more sensitive to speech sounds
    - Notice units and phrases of their own language



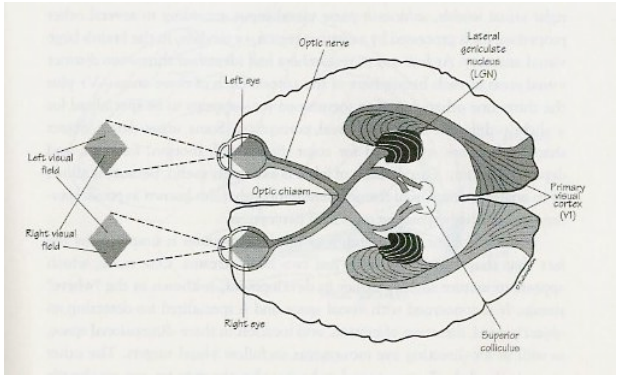
PHYSICAL

- Perceptual Development
  - Eye development and visual brain centers in the first half year lead to:
    - Focusing
    - Color discrimination
    - Visual acuity
    - Visual tracking



PHYSICAL

- Perceptual Development
  - Depth perception
    - Responsiveness to motion then
    - Sensitivity to binocular then
    - Sensitivity to picture cues



PHYSICAL

- Perceptual Development
  - Contrast sensitivity accounts for visual preferences
    - Look at border and single feature then
    - Explore internal features then

    - Detect pattern organization then
    - Discriminate complex and meaningful patterns

PHYSICAL

- Perceptual Development
  - Birth - Size and shape constancy build understanding of the world of objects
  - Infants - Rely on motion and spatial arrangements to identify objects
  - 6 months – Rely on shape, color and texture

COGNITION

- Piaget's Theory
  - Sensorimotor
    - Circular reaction – Reflexes gradually transformed into more flexible reaction patterns

COGNITION

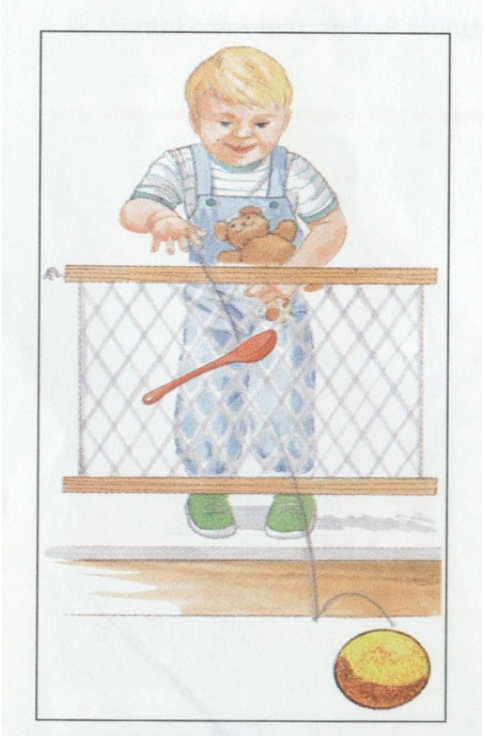
- Piaget's Theory
  - Intentional goal-directed movements

COGNITION

- Piaget's Theory
  - Physical causality and object permanence

COGNITION

- Piaget's Theory
  - Functional Play
  - Experimentation

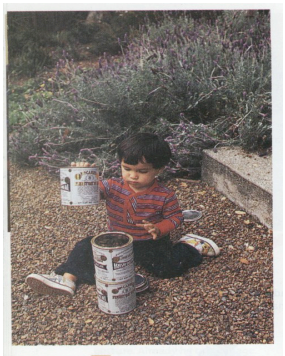


COGNITION

- Piaget's Theory
  - Mental representation
  - Make-believe play

COGNITION

- Piaget – Now We Know
  - Underestimated capacities of young infants
  - Newborns have more built-in equipment to make sense of their world than Piaget assumed



COGNITION

- Information Processing – not stages
  - Sensory register
  - Working or short term memory
  - Long term memory

COGNITION

- Information processing – cont.
  - Information flows
  - Mental strategies operate on it to increase the efficiency of thinking

COGNITION

- Information processing – cont.
  - Young Infants
    - Attend to increasingly more aspects of their environment
    - Take information more quickly
    - Shift attention from one stimulus to another
    - Capable of recognition memory
    - Memory is sequential

COGNITION

- Information processing – cont.
  - 7 months
    - Can recall stimuli that are not present
  - 2 years
    - Attention to novelty subsides and sustained attention improves
    - Can categorize memories and spontaneously sort objects

COGNITION

- Information processing – cont.
  - End of toddler hood
    - Excellent recall for people, places and things
    - Biology and social experience contribute to autobiographical memory

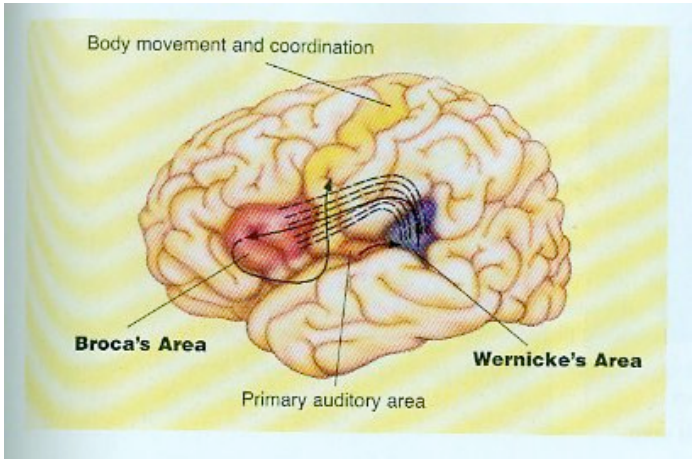
COGNITION

- Social context – Vygotsky
  - By engaging in joint activities with more skilled partners just ahead of their development (ZONE OF PROXYMAL DEVELOPMENT)

Cognitive competence increases

COGNITION

- Language development
  - Humans have evolved specialized areas in the brain that support language development



COGNITION

- Language development
  - As children acquire language, the brain becomes more specialized for language processing
  - Complete mastery of some grammatical forms are not achieved until well into middle childhood

COGNITION

- Language development is assisted through interaction

COGNITION

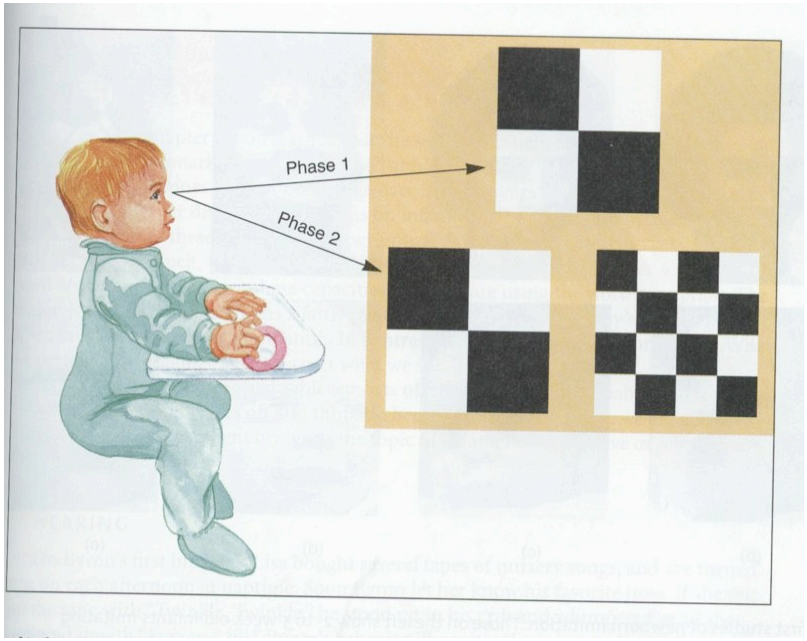
- Peek-a-boo teaches turn taking

COGNITION

- Reflexes will be modified as they are applied to the environment

COGNITION

- Inhibition/disinhibition



COGNITION

- Imitation of adult facial expressions and gestures

COGNITION

- 1-4 months
  - Exploration includes
    - Kicking
    - Reaching
    - Grasping
  - Little anticipation of events

COGNITION

- 1-4 months
  - Awareness of object permanence

  - Awareness of object solidity
  - Some awareness of gravity and object collision
  - Deferred imitation of adult facial expression – holds in memory

COGNITION

- 4-8 months
  - Exploration includes
    - Improved reaching and grasping
    - Swiping
    - Banging
    - Throwing

COGNITION

- 4-8 months
  - Improved understanding of gravity and object collision
  - Use of shape, texture and color to identify objects as separate units
  - Imitation of adults' actions on objects – only after much practice and repetition

COGNITION

- 8-12 months
  - Goal directed behavior
  - Improved anticipation of events
  - Can retrieve an object from first hidden location
  - More complex behaviors are imitated

COGNITION

- 12-18 months
  - Explore objects by acting on them in new ways
  - Trial and error solutions to sensorimotor problems
  - Can search in several locations for a hidden object
  - Can imitate behaviors seen 1 week earlier and in different settings

COGNITION

- 18-24 months
  - Impulsive solutions to sensorimotor problems due to internal representation
  - Can find an object that has been moved while out of sight
  - Imitation of entire social roles in make-believe play

EMOTIONAL AND SOCIAL

- THEORIES
  - Erickson
    - Warm, responsive care giving necessary
      - Basic Trust versus Mistrust
    - Guidance and reasonable choices
      - Autonomy versus shame and doubt

EMOTIONAL AND SOCIAL

- Theories
  - Mahler
    - Sensitive, loving care fosters bonding

EMOTIONAL AND SOCIAL

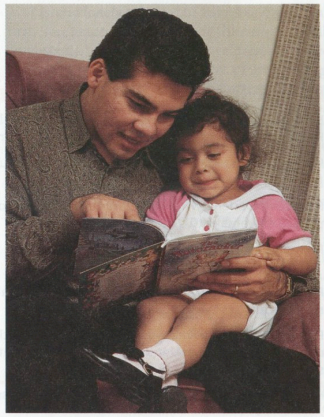
- Provides foundation for separation-individuation
- Representation and language help create a positive, inner image of mother
- Can be relied on in her absence

EMOTIONAL AND SOCIAL

- Emotional Development
  - Signs of all basic emotions present in infancy
    - 6-10 weeks = social smile
    - Laughter = 3-4 months

EMOTIONAL AND SOCIAL

- Happiness strengthens the parent-child bond
- Happiness supports physical and cognitive mastery



EMOTIONAL AND SOCIAL

- Emotional Development
  - 2nd ½ of first year – anger and fear surface as stranger anxiety
    - Survival value
    - Motor improvement

EMOTIONAL AND SOCIAL

- Emotional Development
  - 8-10 months
    - Social referencing – ability to understand the feelings of others as perception of facial expressions are organized
  - Middle of year 2
    - Realize that emotional response of others may differ from their own

EMOTIONAL AND SOCIAL

- Emotional Development
  - Toddler hood
    - Self-conscious emotions
      - Shame
      - Embarrassment
      - Pride

EMOTIONAL AND SOCIAL

- Caregivers help by
  - Relieving distress
  - Engaging in stimulating play
  - Discouraging negative emotion

EMOTIONAL AND SOCIAL

- Temperament
  - Easy child – (largest group) quickly establishes routines, is cheerful and adapts easily
  - Difficult child – (10%) Irregular in daily routines,slow to accept new experiences and tends to react negatively and intensely
  - Slow to warm up child – (15%) inactive, mild, low-key reactions, negative mood and adjusts slowly to new experiences

EMOTIONAL AND SOCIAL

- Biological roots but child rearing can effect change over time
- Ethnic and sex differences are due to combined influence of biology and child rearing

EMOTIONAL AND SOCIAL

- Development of Attachment
  - Attachment supports survival
    - Babies actively contribute to bonding
    - Built-in encourage the parent to remain close to the infant

EMOTIONAL AND SOCIAL

- Development of Attachment
  - 6-8 months
  - Separation anxiety
  - Use of parent as secure base
  - Indicate true attachment bond has been formed

EMOTIONAL AND SOCIAL

- Development of Attachment
  - Toddlers use language rather than following and clinging
    - Requests
    - Persuasion
  - Develop an internal working model for all future close relationships

EMOTIONAL AND SOCIAL

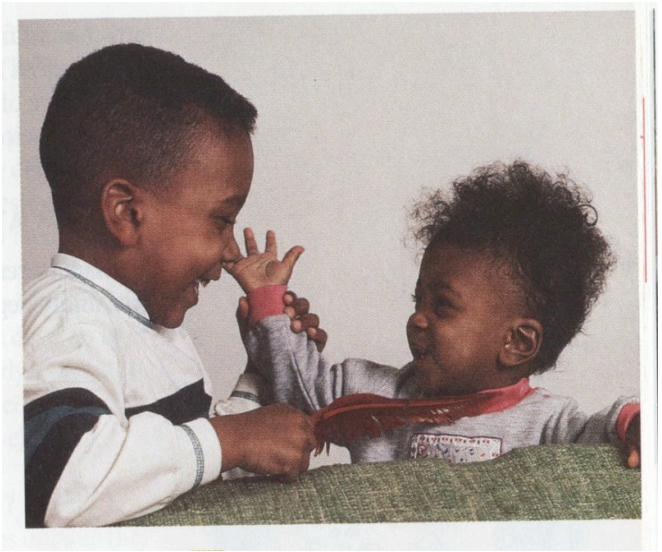
- Deprivation of affectional ties
  - Lasting social and emotional problems
  - Caregivers need to adapt to temperament and physical needs of infant

EMOTIONAL AND SOCIAL

- Early in first year develop rich emotional relationships with fathers and siblings
- Peer sociability begins in infancy with socially isolated acts

EMOTIONAL AND SOCIAL

- Become reciprocal exchanges in the second year



EMOTIONAL AND SOCIAL

- Self-development
  - I-SELF
    - Begins as infant recognizes that his own actions cause objects and people to react in predictable ways
  - ME-SELF
    - Toddler can see himself as an object of knowledge and evaluation

EMOTIONAL AND SOCIAL

- Self-development
  - Toddlers compare themselves to others
    - Age
    - Sex
    - Physical characteristics
    - Goodness and badness
    - Foundation for:
      - Empathy
      - Compliance
      - Self-control